

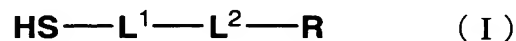
**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for immobilizing nucleic acid on a solid phase-substrate by co-adsorption, comprising:

forming a composition bringing the solid phase substrate into contact with a composition comprising:

a total concentration of 0.1 to 2  $\mu$ M of a nucleic acid as a probe, and  
a compound or a salt thereof, the compound being represented by the following formula:



where:

$\text{L}^1$  is a single bond or ~~a  $\text{C}_{1-15}$ -alkylene~~ an alkylene group having 1 to 15 carbon atoms;

$\text{L}^2$  is selected from the group consisting of a single bond, a nucleic acid, a polyethylene glycol group,  $-\text{CO}-\text{NH}-$ , ~~or~~ and  $-\text{NH}-\text{CO}-$ ;

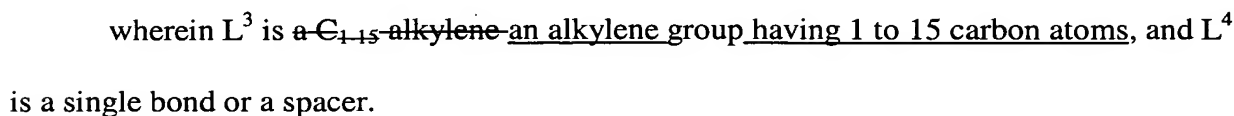
R is selected from the group consisting of a hydroxyl group, an amino group, a ferrocenyl group, ~~or~~ and a carboxyl group; and

$\text{L}^1$  and  $\text{L}^2$  are not both single bonds; ~~and~~

then bringing the solid phase substrate into contact with the composition; and  
incubating the composition in contact with a surface of the solid phase  
substrate-substrate,

wherein the composition comprises a nucleic acid and a compound represented by formula I at a ratio of 40/60 to 60/40.

3. (Currently Amended) The method according to claim 1, wherein the nucleic acid as the probe comprises at ~~the~~ a 3' end or ~~the~~ a 5' end a group represented by the following formula:



4. (Currently Amended) The method according to claim 1, wherein the nucleic acid as the probe has at the a 5' end a group represented by the following formula:



5. (Previously Presented) The method according to claim 4, wherein

L<sup>4</sup> is selected from the group consisting of a nucleic acid, -CO-NH-, -NH-CO-, a polyethylene glycol group, and a polyethylene glycol phosphate group.

6. (Currently Amended) The method according to claim 1, wherein the total concentration of the nucleic acid and the compound represented by formula I or ~~the a~~ salt thereof in the composition is 0.5 to 1.5  $\mu\text{M}$ .

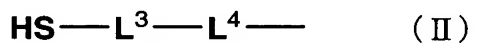
7. (Currently Amended) The method according to claim 1, wherein the total concentration of the nucleic acid and the compound represented by formula I or ~~the a~~ salt thereof in the composition is 1  $\mu\text{M}$ .

8. (Canceled)
9. (Currently Amended) The method according to claim 1, wherein R in the compound represented by formula I is a hydroxyl group.
10. (Withdrawn) The method according to claim 1, wherein L<sup>1</sup> in the formula I is a single bond, and L<sup>2</sup> is a polyethylene glycol group.
11. (Currently Amended) The method according to claim 1, wherein L<sup>1</sup> in the compound represented by formula I is ~~a C<sub>4-8</sub>~~ an alkylene group having 4 to 8 carbon atoms, and L<sup>2</sup> is a single bond.
12. (Currently Amended) The method according to claim 1, wherein the formula represented by compound I is 6-mercapto-1-hexanol.
13. (Original) The method according to claim 1, wherein the solid phase substrate is a single layered substrate or a multiple layered substrate comprising at least one material selected from the group consisting of glass, polymer resin and metal.
14. (Currently Amended) The method according to claim 1, wherein ~~the~~ a surface of the solid phase substrate on which nucleic acid is adsorbed is coated with a thin gold film.
15. (Currently Amended) The method according to claim 1, wherein the solid phase substrate ~~is~~ comprises a glass substrate ~~with~~ and a thin gold film vapor-deposited on ~~its~~ a surface of, ~~and may further comprises, at least one intermediate layer between the thin gold film and the glass substrate.~~
16. (Currently Amended) The method according to claim 1, wherein the nucleic acid as the probe has a base length of 15 to 30 ~~base length~~ nucleotides.
17. (Original) The method according to claim 1, wherein the incubation is carried out at a temperature of 25° C to 40° C.
18. (Currently Amended) The method according to claim 1, wherein:

the nucleic acid as the probe ~~is~~ comprises:

a single-stranded polynucleotide or ~~an~~ oligonucleotide comprising  
nucleotides selected from the group consisting of ~~single-stranded~~ DNA, RNA, and ~~PNA~~, and  
~~may also have the group represented by formula II;~~ PNA; and

at the 3' end or the 5' end a group represented by the following formula:



wherein L<sup>3</sup> is an alkylene group, and L<sup>4</sup> is a single bond or a spacer;

the formula represented by compound I is 6-mercapto-1-hexanol;

the total concentration of the nucleic acid and 6-mercapto-1-hexanol in the  
composition is 0.5 to 1.5  $\mu\text{M}$ ; and

the solid phase substrate ~~is~~ comprises a glass substrate ~~with~~ and a thin gold  
film vapor-deposited on ~~its~~ a surface of the glass substrate, ~~and further, at least one~~  
intermediate layer may be made exist ~~between the thin gold film and the glass substrate.~~

19-25. (Canceled)